

AQ GUARD SMART 1000



Air quality analyzer for monitoring fine particulate matter (PM₁, PM_{2.5}, PM₄, PM₁₀, TSP) under demanding environmental conditions

BENEFITS

- Technology based on the certified Fidas® 200 series (EN 16450 and MCERTS)
- Simultaneous measurement of PM₁, PM_{2.5}, PM₄, PM₁₀, Cn with high temporal resolution
- Easy and fast installation
- Data visualization via cloud "MyAtmosphere"
- Communication via GPRS/3G/4G/Ethernet/Wi-Fi, optional: LoRaWAN
- Extendable with weather station / LoRa / solar protection

APPLICATIONS

- Urban air quality monitoring
- Smart city projects
- Open pit mining and landfills
- Formation and dispersion studies
- Construction sites
- Immission monitoring of industrial plants
- Measurement of dust emissions from road and rail traffic as well as ports
- Risk areas (natural and anthropogenic)

DATASHEET

Measuring principle	Optical light scattering of single particles
Reported data	PM ₁ , PM _{2,5} , PM ₄ , PM ₁₀ , TSP, C _N , particle size distribution, ambient pressure, ambient temperature, rel. ambient humidity, optional: SO ₂ , CO, NO ₂ , O ₃
Measurement range (number C _N)	0 – 20,000 particles/cm ³
Measurement range (size)	0.175 – 20 μm
Measurement range (mass)	0 – 100 mg/m ³ (depending on the composition of the aerosol)
Measurement uncertainty	< 15 % for PM _{2,5} , < 20 % for PM ₁₀ (expanded measurement uncertainty according to EN 16450, corrected – MCERTS)
Size channels	64 (32/decade)
Time resolution	1 min, moving average 1 min
Light source	Long term stable LED
Power consumption	1.2 A in standard operation, 1.7 A with additional heating
Weight	Approx. 6 kg
Installation conditions	-20 – +50 °C
Interfaces	USB, Ethernet (LAN), Wi-Fi, 3G/4G via Modem, optional: LoRaWAN
Protocols	ASCII, MODBUS, UDP
Power supply	12 V, supplied power supply

weitere Parameter auf der Webseite ...



Mehr Informationen:
<https://www.palas.de/product/aq-guard-smart1000>